

Date: Mon, 4 Jul 94 04:30:24 PDT  
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>  
Errors-To: Ham-Space-Errors@UCSD.Edu  
Reply-To: Ham-Space@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Space Digest V94 #176  
To: Ham-Space

Ham-Space Digest                      Mon, 4 Jul 94                      Volume 94 : Issue 176

Today's Topics:

EEK!! Where did archive.afit.af.mil go???? (2 msgs)  
    Graphical Tracking Software  
    ORBS\$.182.OSCAR.AMSAT  
    ORBS\$182.MICRO.AMSAT  
    ORBS\$182.MISC.AMSAT

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>  
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 2 Jul 1994 22:53:29 GMT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!vixen.cso.uiuc.edu!  
newsfeed.ksu.ksu.edu!moe.ksu.ksu.edu!wizard.uark.edu!comp!plaws@network.ucsd.edu  
Subject: EEK!! Where did archive.afit.af.mil go????  
To: ham-space@ucsd.edu

I just tried to ftp to archive.afit.af.mil to get a new set of keplerian  
elements and IT'S GONE!! "Unknown host". Please tell me the nameserver  
here is screwy, else tell us all where there is another site (not sight  
or cite).

Peter Laws <plaws@comp.uark.edu> | "Let's make sure history never forgets the  
n5uwy@ka5bml.#nwar.ar.usa.noam | name ... Enterprise" ST:TNG - 1987-1994

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Date: 4 Jul 1994 02:40:36 -0700  
From: network.ucsd.edu!not-for-mail@network.ucsd.edu

Subject: EEK!! Where did archive.afit.af.mil go????  
To: ham-space@ucsd.edu

In article <2v4r59\$t0b@wizard.uark.edu> plaws@comp..uark.edu (Peter Laws) writes:  
>I just tried to ftp to archive.afit.af.mil to get a new set of keplerian  
>elements and IT'S GONE!! "Unknown host".

This is common, especially on weekends. Just wait a few hours or days  
and try again. Not to worry.

You can also get elements by telnetting (not FTP) to the raidbbs at  
raidbbs.gsfc.nasa.gov Login is "raid" and password is "goddard1". You  
then follow the instructions... The interface is your typical cheezy  
BBS, so there is a price to pay, mainly in the time it takes to get  
element sets off of it. But, on the good side, they are the most recent  
elements you will find, usually a day or two fresher than on  
archive.afit.af.mil

Brent

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Date: Sun, 3 Jul 1994 14:14:56 GMT  
From: ihnp4.ucsd.edu!swrinde!emory!cherry.atlanta.com!nanovx!kd4dts!  
jcw@network.ucsd.edu  
Subject: Graphical Tracking Software  
To: ham-space@ucsd.edu

Not being familiar with any of the tracking software that's available, are  
there any packages that display the satellites (preferabbly a great many)  
orbiting with a point of view from, oh say, 20,000 miles up, and about the  
same out in some direction? Basically a 3D presentation of the positions?

- John

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John C. Wren (kd4dts) | "The UNIX operating system has a command, NICE,  
jcw@kd4dts.atl.ga.us | which allows a user to voluntarily reduce the  
..!emory!wa4mei!kd4dts!jcw | priority of his process, in order to be nice to

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Date: Fri, 1 Jul 1994 14:16:00 MDT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu  
Subject: ORBS\$.182.OSCAR.AMSAT  
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-182.0  
Orbital Elements 182.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES  
FROM WA5QGD FORT WORTH, TX July 1, 1994  
BID: \$ORBS-182.0  
TO ALL RADIO AMATEURS BT

Satellite: AO-10  
Catalog number: 14129  
Epoch time: 94176.41110075  
Element set: 289  
Inclination: 27.0856 deg  
RA of node: 321.0039 deg  
Eccentricity: 0.6024383  
Arg of perigee: 189.2195 deg  
Mean anomaly: 150.8337 deg  
Mean motion: 2.05882336 rev/day  
Decay rate: -3.06e-06 rev/day<sup>2</sup>  
Epoch rev: 8295  
Checksum: 298

Satellite: UO-11  
Catalog number: 14781  
Epoch time: 94173.06474633  
Element set: 702  
Inclination: 97.7861 deg  
RA of node: 187.5613 deg  
Eccentricity: 0.0010677  
Arg of perigee: 254.9523 deg  
Mean anomaly: 105.0499 deg  
Mean motion: 14.69223055 rev/day  
Decay rate: 1.36e-06 rev/day<sup>2</sup>  
Epoch rev: 55102  
Checksum: 307

Satellite: RS-10/11  
Catalog number: 18129  
Epoch time: 94180.82901643  
Element set: 918  
Inclination: 82.9242 deg  
RA of node: 319.4951 deg  
Eccentricity: 0.0012229  
Arg of perigee: 356.9772 deg  
Mean anomaly: 3.1307 deg  
Mean motion: 13.72338758 rev/day  
Decay rate: 2.2e-07 rev/day<sup>2</sup>  
Epoch rev: 35164

Checksum: 306

Satellite: A0-13

Catalog number: 19216

Epoch time: 94180.17114065

Element set: 926

Inclination: 57.7928 deg

RA of node: 244.7541 deg

Eccentricity: 0.7213733

Arg of perigee: 344.7303 deg

Mean anomaly: 1.9030 deg

Mean motion: 2.09725008 rev/day

Decay rate: -4.92e-06 rev/day<sup>2</sup>

Epoch rev: 4626

Checksum: 292

Satellite: F0-20

Catalog number: 20480

Epoch time: 94180.92151497

Element set: 701

Inclination: 99.0361 deg

RA of node: 330.3349 deg

Eccentricity: 0.0540560

Arg of perigee: 310.6901 deg

Mean anomaly: 44.8395 deg

Mean motion: 12.83226179 rev/day

Decay rate: -1.0e-07 rev/day<sup>2</sup>

Epoch rev: 20576

Checksum: 284

Satellite: A0-21

Catalog number: 21087

Epoch time: 94180.84490761

Element set: 484

Inclination: 82.9449 deg

RA of node: 133.3485 deg

Eccentricity: 0.0037046

Arg of perigee: 49.6353 deg

Mean anomaly: 310.8027 deg

Mean motion: 13.74541737 rev/day

Decay rate: 9.4e-07 rev/day<sup>2</sup>

Epoch rev: 17132

Checksum: 312

Satellite: RS-12/13

Catalog number: 21089

Epoch time: 94177.55866591

Element set: 703

Inclination: 82.9190 deg  
RA of node: 4.4957 deg  
Eccentricity: 0.0030799  
Arg of perigee: 81.6385 deg  
Mean anomaly: 278.8252 deg  
Mean motion: 13.74042909 rev/day  
Decay rate: 4.8e-07 rev/day^2  
Epoch rev: 16993  
Checksum: 351

Satellite: ARSENE  
Catalog number: 22654  
Epoch time: 94169.23096299  
Element set: 263  
Inclination: 1.8748 deg  
RA of node: 99.1484 deg  
Eccentricity: 0.2919067  
Arg of perigee: 184.0582 deg  
Mean anomaly: 172.2245 deg  
Mean motion: 1.42202724 rev/day  
Decay rate: -1.11e-06 rev/day^2  
Epoch rev: 121  
Checksum: 288

/EX

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Date: Fri, 1 Jul 1994 14:17:00 MDT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu  
Subject: ORBS\$182.MICRO.AMSAT  
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-182.D  
Orbital Elements 182.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS  
FROM WA5QGD FORT WORTH,TX July 1, 1994  
BID: \$ORBS-182.D  
TO ALL RADIO AMATEURS BT

Satellite: UO-14  
Catalog number: 20437  
Epoch time: 94181.17094406  
Element set: 6  
Inclination: 98.5888 deg  
RA of node: 265.7706 deg

Eccentricity: 0.0011270  
Arg of perigee: 148.7156 deg  
Mean anomaly: 211.4700 deg  
Mean motion: 14.29848006 rev/day  
Decay rate: 1.2e-07 rev/day<sup>2</sup>  
Epoch rev: 23144  
Checksum: 288

Satellite: A0-16  
Catalog number: 20439  
Epoch time: 94178.21712155  
Element set: 804  
Inclination: 98.5981 deg  
RA of node: 264.1007 deg  
Eccentricity: 0.0011033  
Arg of perigee: 158.0706 deg  
Mean anomaly: 202.0949 deg  
Mean motion: 14.29901614 rev/day  
Decay rate: 1.0e-07 rev/day<sup>2</sup>  
Epoch rev: 23103  
Checksum: 269

Satellite: D0-17  
Catalog number: 20440  
Epoch time: 94178.24044877  
Element set: 804  
Inclination: 98.5990 deg  
RA of node: 264.4494 deg  
Eccentricity: 0.0011506  
Arg of perigee: 157.3761 deg  
Mean anomaly: 202.7928 deg  
Mean motion: 14.30041300 rev/day  
Decay rate: 1.7e-07 rev/day<sup>2</sup>  
Epoch rev: 23105  
Checksum: 287

Satellite: W0-18  
Catalog number: 20441  
Epoch time: 94181.15467102  
Element set: 807  
Inclination: 98.5977 deg  
RA of node: 267.3273 deg  
Eccentricity: 0.0012054  
Arg of perigee: 149.3828 deg  
Mean anomaly: 210.8060 deg  
Mean motion: 14.30015655 rev/day  
Decay rate: 1.0e-08 rev/day<sup>2</sup>  
Epoch rev: 23147

Checksum: 283

Satellite: L0-19

Catalog number: 20442

Epoch time: 94178.75317896

Element set: 803

Inclination: 98.5991 deg

RA of node: 265.2158 deg

Eccentricity: 0.0012241

Arg of perigee: 155.8695 deg

Mean anomaly: 204.3055 deg

Mean motion: 14.30111899 rev/day

Decay rate:  $3.1e-07$  rev/day<sup>2</sup>

Epoch rev: 23114

Checksum: 309

Satellite: U0-22

Catalog number: 21575

Epoch time: 94181.15732371

Element set: 508

Inclination: 98.4344 deg

RA of node: 255.3931 deg

Eccentricity: 0.0006801

Arg of perigee: 252.7171 deg

Mean anomaly: 107.3281 deg

Mean motion: 14.36921644 rev/day

Decay rate:  $4.6e-07$  rev/day<sup>2</sup>

Epoch rev: 15494

Checksum: 295

Satellite: K0-23

Catalog number: 22077

Epoch time: 94181.22418147

Element set: 403

Inclination: 66.0834 deg

RA of node: 252.6851 deg

Eccentricity: 0.0014564

Arg of perigee: 283.4501 deg

Mean anomaly: 76.4893 deg

Mean motion: 12.86286916 rev/day

Decay rate:  $-3.7e-07$  rev/day<sup>2</sup>

Epoch rev: 8846

Checksum: 315

Satellite: A0-27

Catalog number: 22825

Epoch time: 94179.73033811

Element set: 301

Inclination: 98.6528 deg  
RA of node: 255.4221 deg  
Eccentricity: 0.0008353  
Arg of perigee: 170.1806 deg  
Mean anomaly: 189.9539 deg  
Mean motion: 14.27627600 rev/day  
Decay rate: -1.0e-08 rev/day^2  
Epoch rev: 3933  
Checksum: 300

Satellite: IO-26  
Catalog number: 22826  
Epoch time: 94179.21993428  
Element set: 301  
Inclination: 98.6522 deg  
RA of node: 254.9542 deg  
Eccentricity: 0.0008849  
Arg of perigee: 173.5876 deg  
Mean anomaly: 186.5418 deg  
Mean motion: 14.27731640 rev/day  
Decay rate: -3.0e-08 rev/day^2  
Epoch rev: 3926  
Checksum: 333

Satellite: KO-25  
Catalog number: 22830  
Epoch time: 94179.22798762  
Element set: 306  
Inclination: 98.5529 deg  
RA of node: 252.0960 deg  
Eccentricity: 0.0012037  
Arg of perigee: 140.4552 deg  
Mean anomaly: 219.7507 deg  
Mean motion: 14.28058431 rev/day  
Decay rate: 2.2e-07 rev/day^2  
Epoch rev: 3927  
Checksum: 303

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Date: Fri, 1 Jul 1994 14:20:00 MDT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!  
newsxfer.itd.umich.edu!nnntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu  
Subject: ORBS\$182.MISC.AMSAT  
To: ham-space@ucsd.edu



SB KEPS @ AMSAT \$ORBS-182.M  
Orbital Elements 182.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES  
FROM WA5QGD FORT WORTH, TX July 1, 1994  
BID: \$ORBS-182.M  
TO ALL RADIO AMATEURS BT

Satellite: POSAT  
Catalog number: 22829  
Epoch time: 94179.72381534  
Element set: 294  
Inclination: 98.6491 deg  
RA of node: 255.4805 deg  
Eccentricity: 0.0010222  
Arg of perigee: 158.5288 deg  
Mean anomaly: 201.6320 deg  
Mean motion: 14.28031163 rev/day  
Decay rate: 2.6e-07 rev/day<sup>2</sup>  
Epoch rev: 3934  
Checksum: 291

Satellite: MIR  
Catalog number: 16609  
Epoch time: 94181.23244135  
Element set: 659  
Inclination: 51.6459 deg  
RA of node: 121.1314 deg  
Eccentricity: 0.0003021  
Arg of perigee: 97.4905 deg  
Mean anomaly: 262.6430 deg  
Mean motion: 15.56430535 rev/day  
Decay rate: 3.287e-05 rev/day<sup>2</sup>  
Epoch rev: 47807  
Checksum: 286

Satellite: HUBBLE  
Catalog number: 20580  
Epoch time: 94180.20403819  
Element set: 501  
Inclination: 28.4677 deg  
RA of node: 158.7789 deg  
Eccentricity: 0.0006123  
Arg of perigee: 208.6089 deg  
Mean anomaly: 151.4157 deg  
Mean motion: 14.90631325 rev/day  
Decay rate: 3.62e-06 rev/day<sup>2</sup>  
Epoch rev: 3118

Checksum: 285

Satellite: GRO  
Catalog number: 21225  
Epoch time: 94178.31390620  
Element set: 117  
Inclination: 28.4589 deg  
RA of node: 161.8278 deg  
Eccentricity: 0.0003293  
Arg of perigee: 325.3791 deg  
Mean anomaly: 34.6587 deg  
Mean motion: 15.40981386 rev/day  
Decay rate: 1.129e-05 rev/day^2  
Epoch rev: 5850  
Checksum: 307

Satellite: UARS  
Catalog number: 21701  
Epoch time: 94179.26756800  
Element set: 544  
Inclination: 56.9843 deg  
RA of node: 114.6578 deg  
Eccentricity: 0.0006029  
Arg of perigee: 104.7294 deg  
Mean anomaly: 255.4410 deg  
Mean motion: 14.96431723 rev/day  
Decay rate: -2.189e-05 rev/day^2  
Epoch rev: 15259  
Checksum: 311

/EX

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End of Ham-Space Digest V94 #176

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